

XXVIII.—Notes on the Collection of African Phasgonuridæ formed by Mr. W. L. Distant in the Transvaal &c., with Descriptions of Two new Species. By W. F. KIRBY, F.L.S., F.E.S., &c.

THIS collection (exclusive of the families Stenopelmatidæ, Gryllacridæ, and Hetrodidæ, which were discussed in the 'Annals' for June 1899, pp. 475-480) includes the following twenty species, belonging to various families. Two species of the genus *Tylopsis* are described as new.

ORTHOPTERA-PHASGONURIDÆ.

Decticiidæ.

GAMPSOCLEINÆ.

Arytropteris, Herm.
basalis, Walk.

Sagidæ.

Clonia, Stål.
vittata, Thunb.
Wahlbergi, Stål.

Conocephalidæ.

CONOCEPHALINÆ.

Pseudorhynchus, Serv.
pungens, Schaum.
Conocephalus, Serv.
consobrinus, Walk.
tuberculatus, Rossi.

XIPHIDIINÆ.

Xiphidium, Serv.
iris, Serv.

Pseudophyllidæ.

PSEUDOPHYLLINÆ.

Zabalius, Bol.
orientalis, Karsch.
Bocagei, Bol.

CYMATOMERINÆ.

Cymatomera, Schaum.
denticollis, Schaum.
spilophora, Walk.

Mecopodidæ.

Anælopoda, Karsch.
latipennis, Burm.

Phaneropteridæ.

ACROMETOPINÆ.

Rhegmatopoda, Brunn.
Brunneri, n. n.

PHANEROPTERINÆ.

Phaneroptera, Serv.
nana, Charp.

TYLOPSINÆ.

Tylopsis, Fieb.
continua, Walk.
marginata, Brunn.
punctulata, sp. n.
rubescens, sp. n.

AMBLYCORYPHINÆ.

Amblycorypha, Stål.
cereris, Stål.
proserpinæ, Brunn.

Decticidæ.

GAMPSOCLEINÆ.

Arytropteris basalis.

Thyrconotus basalis, Walk. Cat. Derm. Salt. ii. p. 247. n. 6 (1869).

Arytropteris angulosa, Heiman, Verh. zool.-bot. Ges. Wien, xliv. p. 204 (1874).

1, Zomba (*P. Rendall*).

Natal (B. M.); Zululand (*Herman*).

Thorancistus, Pictet, appears to me to be a different genus.

Sagidæ.

Clonia vittata.

Locusta vittata, Thunb. Nov. Ins. Spec. v. p. 102 (1789); Mém. Acad. Pétersb. v. p. 280 (1815).

Clonia vittata, Stål, Rec. Orth. p. 119 (1874).

Sagu maculosa, Walk. Cat. Derm. Salt. ii. p. 294. n. 16 (1869).

1, Pretoria (*Distant*).

Between Olyfants River and Slang River (*Thunberg*).

Clonia Wahlbergi.

Clonia Wahlbergi, Stål, Rec. Orth. ii. p. 119 (1874); Dist. Nat. in Transvaal, p. 83, cum fig. (1892).

1, Transvaal, Waterberg (*W. L. D.*); 2, Zomba (*P. Rendall*); 2, Barberton (*P. Rendall*).

Natal (*Stål*).

Conocephalidæ.

CONOCEPHALINÆ

Pseudorhynchus pungens.

Conocephalus pungens, Schaum, Monatsb. Akad. Berl. 1853, p. 778; Peters, Reise nach Mossamb. v. p. 126, pl. vii. fig. 12 (1862).

Pseudorhynchus pungens, Redt. Verh. zool.-bot. Ges. Wien, xli. p. 365, pl. iii. fig. 18 (1891).

2, Fort Johnston (*P. Rendall*).

Zanzibar, Mozambique (*Redtenbacher*).

Conocephalus consobrinus.

Conocephalus consobrinus, Walk. Cat. Derm. Salt. ii. p. 315. n. 4 (1869).

9, Pretoria (*W. L. D.*); 1, Barberton (*P. Rendall*).

Natal (B. M.).

Conocephalus tuberculatus.*Locusta tuberculata*, Rossi, Faun. Etr. i. p. 269 (1790).*Locusta mandibularis*, Charp. Hor. Ent. p. 106 (1825).*Conocephalus mandibularis*, Brunn. Prodr. Eur. Orth. p. 304 (1832);
Redt. Verh. zool.-bot. Ges. Wien, xii. p. 427. n. 101 (1891).1, Fort Johnston (*P. Rendall*).

Common in South Europe and almost throughout Africa.

XIPHIDIINÆ.*Xiphidium iris*.*Xiphidium iris*, Serv. Ins. Orth. p. 506 (1839).*Xiphidium iris*, Redt. Verh. zool.-bot. Ges. Wien, xli. p. 515 (1891).*Xiphidium punctipenne*, Walk. Cat. Derm. Salt. ii. p. 272. n. 14 (1869).*Xiphidium tenue*, Walk. l. c. n. 15 (1891).1, Pretoria (*W. L. D.*); 1, Fort Johnston, Nyasaland
(*P. Rendall*).Mauritius, Rodriguez, Madagascar, Gaboon, Zanzibar
(*Redt.*); S. Africa (*B. M.*).*Pseudophyllidæ*.*PSEUDOPHYLLINÆ*.*Zabalius orientalis*.*Matæus orientalis*, Karsch, Berl. ent. Zeitschr. xxxvi. p. 85 (1890);
Brunn. Mon. Pseud. p. 30 (1895).1, Barberton (*P. Rendall*).Usambara, Tanganyika (Berlin Museum); Zanzibar
(*Dohrn*); Bihe (?) (*Bolivar*).

The descriptions of this species are very poor. Mr. Distant's specimen has broad oblique yellow lines, with slight pseudopodiform projections, and narrowly bordered on the outside with black. In fact it much resembles *Z. Bocagei*, but the thoracic granules are less numerous, and are yellow in front, and reddish behind instead of black.

Zabalius Bocagei.*Mustius Bocagei*, Bol. Jorn. Sci. Lisb. (2) i. p. 221 (1890).1, Angola (*Monteiro*).

The Natural History Museum possesses a discoloured specimen from the Congo which agrees with Bolivar's description in having the inside of the hind femora blood-red. Mr. Distant's specimen is only slightly faded on the head &c., and is pale green, with the thoracic granules black. The

radial nervure of the tegmina is orange at the base, as well as the front border of the pronotum; the transverse nervures of the tegmina are broadly yellow, narrowly edged behind with black, and the inner marginal area is brownish yellow except at the base, but may be slightly discoloured. The hind femora are green, with a row of reddish-brown spots on the inner side, and a double row of short stout yellow spines beneath, most numerous on the outer carina. The tips of the femora and the whole of the tibiæ and tarsi are reddish. In the faded Museum specimen the pale transverse lines of the tegmina are bordered outside with pink.

Until a larger series of fresh specimens is received, I should not be justified in separating Mr. Distant's specimen as a distinct species.

CYMATOMERINÆ.

Cymatomera denticollis.

Cymatomera denticollis, Schaum, Monatsb. Akad. Berl. 1853, p. 778; Peters, Reise nach Mossamb. v. p. 123, pl. vii. fig. 9 (1862); Karsch, Berl. ent. Zeitschr. xxxvi. p. 97 (1891); Brunn. Mon. Pseud. p. 83 (1895).

Cymatomera Schaumi, Stål, Öfv. Vet.-Akad. Förh. xiii. p. 170 (1856).

2, Barberton (*P. Rendall*).

Mozambique (*Schaum*); Delagoa Bay, Tanganyika (*Karsch*); Zambesi (*Brunner*); Natal and Nyasa (B. M.).

Cymatomera spilophora.

Cymatomera spilophora, Walk. Cat. Derm. Salt. iii. p. 455. n. 3 (1870).

Cymatomera Brancsiki, Brunn. Mon. Pseud. p. 86, pl. iv. fig. 34 (1895).

1, Barberton, Zomba (*P. Rendall*).

Zambesi (*Brunner*); Bangani, German East Africa (Berlin Museum); East Africa (type); Mombasa, Nyasa (B. M.).

Mecopodidæ.

Anedopoda latipennis.

Mecopoda latipennis, Burm. Handb. Ent. ii. p. 686. n. 2 (1839).

1, Zomba (*P. Rendall*).

Natal, Nyasa, Uganda, Sierra Leone (B. M.).

Phaneropteridæ.

ACROMETOPINÆ.

Rhegmatopoda Brunneri, n. n.

|| *Horatosphaga leptocerca*, Brunn. Mon. Phan. p. 89. n. 3, pl. i. figs. 9 a, b (1878).

Rhegmatopoda leptocerca, Brunn. Verh. zool.-bot. Ges. Wien, xli. p. 45 (1891).

1, Barberton (*P. Rendall*).

This cannot be *Horatosphaga leptocerca*, Stål (Æfv. Vet.-Akad. Förh. xxxiii. p. 59, 1876), in which the subgenital plate of the male is described as narrow.

PHANEROPTERINÆ.

Phaneroptera nana.

Phaneroptera nana, Charp. Fieber, Lotos, iii. p. 49 (1853); Brunn. Mon. Phan. p. 213 (1878).

|| *Phaneroptera bilineolata*, pt., Walk. Cat. Derm. Salt. ii. p. 337. n. 16 (1869).

Phaneroptera sparsa, Stål, Æfv. Vet.-Akad. Förh. xiii. p. 170 (1856).

Phaneroptera conspersa, Stål, Rec. Orth. ii. p. 29 (1874).

Phaneroptera tetrasticta, Gerst. Arch. f. Nat. xxxv. p. 215 (1869); Von der Decken's Reisen, iii. (2) p. 32 (1873).

1, Pretoria (*W. L. D.*); 4, Barberton (*P. Rendall*); 12, Fort Johnston, Nyasaland.

Portugal, Fernando Po, Cape, Uru, Zanzibar, Rio Janeiro (*Brunner*); Natal (*B. M.*).

TYLOPSINÆ.

Tylopsis continua.

Phaneroptera continua, Walk. Cat. Derm. Salt. ii. p. 337. n. 20 (1869).

Phaneroptera vicaria, Walk. l. c. p. 338. n. 22 (1869).

|| *Phaneroptera bilineolata*, pt., Walk. l. c. p. 337. n. 16 (1869).

Tylopsis longipennis, Stål, Æfv. Vet.-Akad. Förh. xxxiii. (3) p. 58 (1876).

Tylopsis vittata, Brunn. Mon. Phan. p. 229 (1878).

Tylopsis inhamata, Karsch, Berl. ent. Zeitschr. xxxii. p. 453 (1888).

1, Fort Johnston, Nyasaland (*P. Rendall*); 2, Masil Nek; 1, Pretoria (*W. L. D.*)

Damaraland (*Stål*); Cape (Berlin Museum); Delagoa Bay (*Karsch*); Natal, Zululand (*B. M.*).

I consider all the above names to refer to a single species.

Tylopsis marginata.

Tylopsis marginata, Brunn. Verh. zool.-bot. Ges. Wien, xli. p. 113 (1891).

1, Pretoria (*W. L. D.*); 2, Barberton (*P. Rendall*); 1, Zomba (*P. Rendall*); Natal (*Brunner*).

Apparently a rather scarce species.

Tylopsis punctulata, sp. n.

♂.—Long. corp. 18 millim., cum app. 21 millim.; long. tegm. 31 millim.; long. al. 38 millim.

♀.—Long. corp. 20 millim., cum ovip. 24 millim.; long. tegm. 32 millim.; long. al. 38 millim.; exp. tegm. 65 millim.; exp. al. 69 millim.

Brownish testaceous, probably green when living; antennæ reddish brown; a broad brown band runs from the occiput over the pronotum and the inner margin of the tegmina, extending over the basal area of the latter, for about one third of their length, where it narrows to a border for the rest of their length. Pronotum with a narrow yellow lateral line on each side of the brown band; the deflexed lobes are pale, a little longer than high, with both the lower angles rather obtusely rounded off; they are also marked with a rather large brownish blotch in the middle. Tegmina with rows of sub-obsolete small brown spots between the longitudinal and oblique nervures. Abdomen not denticulated on the median line; the last two segments with black spots in the male; subgenital lamina broad, upcurved, bifid; cerci curved round it, inwards and upwards, and waved towards the tips, which are attenuated and pointed. Female with the ovipositor short, broad, rugose-punctate, suddenly upcurved, and with a short rather abrupt point at the tip. Legs (especially the hind legs) very long and slender; femora unarmed; front and middle tibiæ sulcated, finely spinulose above and below; hind tibiæ closely and thickly set with short black-tipped spines on both carinæ above; below there is a row of spines placed more widely apart on the inner carina only.

3, Zomba (*P. Rendall*).

Distinguished from every other species by the dark spots on the tegmina.

Tylopsis rubescens, sp. n.

Long. corp. 16 millim., cum app. 20 millim.; long. tegm. 29 millim.; long. al. 35 millim.

Male.—Very similar to the last species, evidently green when alive, but except on the tegmina the colour in the only specimen before me has faded to yellowish. Antennæ and legs red. A broad reddish-brown band runs from the occiput over the pronotum and inner margin of the tegmina, as in the last species; on the pronotum it is darkest on the sides, the middle being marked by an obsolete pale line. The deflexed lobes are pale, bordered with a pale line (probably yellow in life) above and below. The lower mouth-parts are black. The dark edging of the inner margin of the tegmina is broadly bordered with reddish, shading into purplish brown beyond the middle, the colour being continued on the exposed part of the wings. There are a few small dark spots between the oblique nervures, but not more than one or two in each interspace. Front tibiæ apparently unarmed above; middle tibiæ with only a single spine visible above. Abdomen red above, with a central carina, but apparently not denticulated; slightly dusted with red on the sides. Cerci red, rather shorter than in *T. punctulata*.

1, Zomba (*P. Rendall*).

Apparently intermediate between *T. marginata*, Brunner, and *T. punctulata*.

AMBYLCORYPHINÆ.

Eurycorypha cereris.

Phylloptera cereris, Stål, Cefv. Vet.-Akad. Förh. xiii. p. 170 (1856).

Eurycorypha cereris, Stål, Rec. Orth. ii. p. 39 (1874); Brunner, Mon.

Pl.an. p. 273 (1878).

|| *Phylloptera proteifolia*, Walk. (nec Burm.) Cat. Derm. Salt. ii. p. 378. n. 11 (1869).

1, Figtree Creek, Barberton (*P. Rendall*).

Caffraria (*Stål*); Grahamstown (*Brunner*); Natal (B. M.).

Eurycorypha proserpinæ.

Eurycorypha proserpinæ, Brunn. Mon. Phan. p. 274, pl. vi. fig. 83 (1878).

|| *Orophus gramineus* (?), Walk. (nec Serv.) Cat. Derm. Salt. iii. p. 434 (1870).

2, Barberton (*P. Rendall*).

Natal (B. M.).